

Author Index to Volume 21

- Adams, S.: *See* Haack, B.
- Ahmad, S. P., Middleton, E. M., and Deering, D. W.: Computation of Diffuse Sky Irradiance from Multidirectional Radiance Measurements, 185
- Allen, L. H.: *See* Chen, E.
- Anderson, V.: *See* Nelson, R.
- Badhwar, G. D., Gargantini, C. E., and Redondo, F. V.: Landsat Classification of Argentina Summer Crops, 111
- Bernard, R., Frezal, M. E., Vidal-Madjar, D., Guyon, D., and Riom, J.: Nadir Looking Airborne Radar and Possible Applications to Forestry, 297
- Bryant, N.: *See* Haack, B.
- Case, D.: *See* Nelson, R.
- Chen, E. and Allen, L. H., Jr.: Comparison of HCMM and GOES Satellite Temperatures and Evaluation of Surface Statistics, 341
- Daughtry, C. S. T.: *See* Grant, L.
- Deering, D. W.: *See* Ahmad, S. P.
- Fagerlund, E.: *See* Kleman, J.
- Field, R. T.: *See* Wen-Yao, L.
- Frezal, M. E.: *See* Bernard, R.
- Gantt, R. G.: *See* Wen-Yao, L.
- Gargantini, C. E.: *See* Badhwar, G. D.
- Goel, N. S. and Grier, T.: Estimation of Canopy Parameters of Row Planted Vegetation Canopies Using Reflectance Data for Only Four View Directions, 37
- Grant, L., Daughtry, C. S. T., and Vanderbilt, V. C.: Variations in the Polarized Leaf Reflectance of *Sorghum bicolor*, 333
- Grier, T.: *See* Goel, N. S.
- Guyon, D.: *See* Bernard, R.
- Haack, B., Bryant, N., and Adams, S.: An Assessment of Landsat MSS and TM Data for Urban and Near-Urban Cover Digital Classification, 201
- Hapke, B.: *See* Woessner, P.
- Hill, G. J. E. and Kelly, G. D.: Habitat Mapping by Landsat for Aerial Census of Kangaroos, 53
- Horning, N.: *See* Nelson, R.
- Jackson, T. J. and O'Neill, P.: Temporal Observations of Surface Soil Moisture Using a Passive Microwave Sensor, 281
- Kelly, G. D.: *See* Hill, G. J. E.
- Kleman, J. and Fagerlund, E.: Influence of Different Nitrogen and Irrigation Treatments on the Spectral Reflectance of Barley, 1
- Klemas, V.: *See* Wen-yao, L.
- Labovitz, M. L. and Masuoka, E. J.: Stochastic Nature of Landsat MSS Data, 263
- Masuoka, E. J.: *See* Labovitz, M. L.
- Middleton, E. M.: *See* Ahmad, S. P.
- Nelson, R., Case, D., Horning, N., Anderson, V., and Pillai, S.: Continental Land Cover Assessment Using Landsat MSS Data, 61
- O'Neill, P.: *See* Jackson, T. J.
- Otterman, J., Strebel, D. E., and Ranson, K. J.: Inferring Spectral Reflectance of Plant Elements by Simple Inversion of Bidirectional Reflectance Measurements, 215
- Philpot, W. D.: *See* Vodacek, A.
- Pillai, S.: *See* Nelson, R.
- Price, J. C.: Calibration of Satellite Radiometers and the Comparison of Vegetation Indices, 15
- Price, J. C.: Combining Panchromatic and Multispectral Imagery from Dual Resolution Satellite Instruments, 119
- Redondo, F. V.: *See* Badhwar, G. D.
- Riom, J.: *See* Bernard, R.
- Rowntree, R. A.: *See* Sadowski, F. G.
- Sadowski, F. G., Sturdevant, J. A., Rowntree, R. A.: Testing the Consistency for Mapping

- Urban Vegetation with High-Altitude Aerial Photographs and Landsat MSS Data, 129
- Sandham, L. A., Van Rensburg, P. A. J.: Landsat as an Aid in Evaluating the Adequacy of a Grain Silo Network, 229
- Sellers, P. J.: Canopy Reflectance Photosynthesis, and Transpiration. II. The Role of Biophysics in the Linearity of their Interdependence, 143
- Strahler, A. H.: *See* Woodcock, C. W.
- Sturdevant, J. A.: *See* Sadowski, F. G.
- Tsonis, A. A.: Determining Rainfall Intensity and Type from GOES Imagery in the Midlatitudes, 29
- Vanderbilt, V. C.: *See* Grant, L.
- Van Rensburg, P. A. J.: *See* Sandham, L. A.
- Vidal-Madjar, D.: *See* Bernard, R.
- Vodacek, A. and Philpot, W. D.: Environmental Effects on Laser-Induced Fluorescence Spectra of Natural Waters, 83
- Wen-Yao, L., Field, R. T., Gantt, R. G., Klemas, V.: Measurement of the Surface Emissivity of Turbid Waters, 97
- Woessner, P. and Hapke, B.: Polarization of Light Scattered by Clover, 243
- Woodcock, C. W. and Strahler, A. H.: The Factor of Scale in Remote Sensing, 311

Subject Index to Volume 21

Aerial Photography

Testing the Consistency for Mapping Urban Vegetation with High-Altitude Aerial Photographs and Landsat MSS Data, F. G. Sadowski, J. A. Sturdevant, and R. A. Rowntree, 129

AVHRR Imagery and Analysis

Determining Rainfall Intensity and Type from GOES Imagery in the Midlatitudes, A. A. Tsonis, 29

Canopy Radiation Modeling

Canopy Reflectance, Photosynthesis, and Transpiration. II. The Role of Biophysics in the Linearity of Their Interdependence, P. J. Sellers, 143
Estimation of Canopy Parameters of Row Planted Vegetation Canopies Using Reflectance Data for Only Four View Directions, N. S. Goel and T. Grier, 37

Inferring Spectral Reflectances of Plant Elements by Simple Inversion of Bidirectional Reflectance Measurements, J. Otterman, D. E. Strelak, and K. J. Ransom, 215

Fluorescence

Environmental Effects on Laser-Induced Fluorescence Spectra of Natural Waters, A. Vodacek and W. D. Philpot, 83

Forestry

Nadir Looking Airborne Radar and Possible Applications to Forestry, R. Bernard, M. E. Frezal, D. Vidal-Madjar, D. Guyon, and J. Riom, 297

GOES Imagery and Analysis

Comparison of HCMM and GOES Satellite Temperatures and Evaluation of Surface Statistics, E. Chen and L. H. Allen, Jr., 341

Determining Rainfall Intensity and Type from GOES Imagery in the Midlatitudes, A. A. Tsonis, 29

Habitat Mapping

Habitat Mapping by Landsat for Aerial Census of Kangaroos, G. J. E. Gill and G. D. Kelly, 53

Land Mapping

Continental Land Cover Assessment Using Landsat MSS Data, R. Nelson, D. Case, N. Horning, V. Anderson, and S. Pillai, 61

The Factor of Scale in Remote Sensing, C. W. Woodcock and A. H. Strahler, 311

Landsat Classification of Argentina Summer Crops, G. D. Badhwar, C. E. Gargantini, and F. V. Redondo, 111

Landsat as an Aid in Evaluating the Adequacy of a Grain Silo Network, L. A. Sandham and P. A. J. van Rensburg, 229

Landsat Analysis

An Assessment of Landsat MSS and TM Data for Urban and Near-Urban Land-Cover Digital Classification, B. Haack, N. Bryant, and S. Adams, 201

Combining Panchromatic and Multispectral Imagery from Dual Resolution Satellite Instruments, J. C. Price, 119

Continental Land Cover Assessment Using Landsat MSS Data, R. Nelson, D. Case, N. Horning, V. Anderson, and S. Pillai, 61

Habitat Mapping by Landsat for Aerial Census of Kangaroos, G. J. E. Gill and G. D. Kelly, 53

Landsat as an Aid in Evaluating the Adequacy of a Grain Silo Network, L. A. Sandham and P. A. J. van Rensburg, 229

Landsat Classification of Argentina Summer Crops, G. D. Badhwar, C. E. Gargantini, and F. V. Redondo, 111

- Stochastic Nature of Landsat MSS Data, M. L. Labovitz and E. J. Masuoka, 263
- Testing the Consistency for Mapping Urban Vegetation with High-Altitude Aerial Photographs and Landsat MSS Data, F. G. Sadowski, J. A. Sturdevant, and R. A. Rowntree, 129
- Microwave Radiometry**
- Nadir Looking Airborne Radar and Possible Applications to Forestry, R. Bernard, M. E. Frezel, D. Vidal-Madjar, D. Guyon, and J. Riom, 297
- Temporal Observations of Surface Soil Moisture Using a Passive Microwave Sensor, T. J. Jackson and P. O'Neill, 281
- Photosynthesis**
- Canopy Reflectance, Photosynthesis, and Transpiration. II. The Role of Biophysics in the Linearity of Their Interdependence, P. J. Sellers, 143
- Polarization**
- Polarization of Light Scattered by Clover, P. Woessner and B. Hapke, 243
- Variations in the Polarized Leaf Reflectance of *Sorghum bicolor*, L. Grant, C. S. T. Daughtry, and V. C. Vanderbilt, 333
- Radar**
- Nadir Looking Airborne Radar and Possible Applications to Forestry, R. Bernard, M. E. Frezel, D. Vidal-Madjar, D. Guyon, and J. Riom, 297
- Radiometric Calibration**
- Calibration of Satellite Radiometers and the Comparison of Vegetation Indices, J. C. Price, 15
- Rainfall Estimation**
- Determining Rainfall Intensity and Type from GOES Imagery in the Midlatitudes, A. A. Tsonis, 29
- Reflectance of Vegetation**
- Canopy Reflectance, Photosynthesis, and Transpiration. II. The Role of Biophysics in the Linearity of Their Interdependence, P. J. Sellers, 143
- Estimation of Canopy Parameters of Row Planted Vegetation Canopies Using Reflectance Data for Only Four View Directions, N. S. Goel and T. Grier, 37
- Inferring Spectral Reflectances of Plant Elements by Simple Inversion of Bidirectional Reflectance Measurements, J. Otterman, D. E. Strelbel, and K. J. Ransom, 215
- Influence of Different Nitrogen and Irrigation Treatments on the Spectral Reflectance of Barley, J. Kleman and E. Fagerlund, 1
- Polarization of Light Scattered by Clover, P. Woessner and B. Hapke, 243
- Variations in the Polarized Leaf Reflectance of *Sorghum bicolor*, L. Grant, C. S. T. Daughtry, and V. C. Vanderbilt, 333
- Satellite Observations**
- Calibration of Satellite Radiometers and the Comparison of Vegetation Indices, J. C. Price, 15
- Combining Panchromatic and Multispectral Imagery from Dual Resolution Satellite Instruments, J. C. Price, 119
- Comparison of HCMM and GOES Satellite Temperatures and Evaluation of Surface Statistics, E. Chen and L. H. Allen, Jr., 341
- Continental Land Cover Assessment Using Landsat MSS Data, R. Nelson, D. Case, N. Horning, V. Anderson, and S. Pillai, 61
- Landsat Classification of Argentina Summar Crops, G. D. Badhwar, C. E. Gargantini, and F. V. Redondo, 111
- Stochastic Nature of Landsat MSS Data, M. L. Labovitz and E. J. Masuoka, 263
- Scale**
- The Factor of Scale in Remote Sensing, C. W. Woodcock and A. H. Strahler, 311
- Sky Irradiance**
- Computation of Diffuse Sky Irradiance from Multidirectional Radiance Measurements,

S. P. Ahmad, E. M. Middleton, and D. W. Deering, 185

Soil Moisture

Temporal Observations of Surface Soil Moisture Using a Passive Microwave Sensor, T. J. Jackson and P. O'Neill, 281

Thermal Relationships

Comparison of HCMM and GOES Satellite Temperatures and Evaluation of Surface Statistics, E. Chen and L. H. Allen, Jr., 341

Measurement of the Surface Emissivity of Turbid Waters, L. Wen-Yao, R. T. Field, R. G. Gantt, and V. Klemas, 97

Urban Analysis

Testing the Consistency for Mapping Urban Vegetation with High-Altitude Aerial Photographs and Landsat MSS Data, F. G. Sadowski, J. A. Sturdevant, and R. A. Rowntree, 129

Vegetation Indices

Calibration of Satellite Radiometers and the Comparison of Vegetation Indices, J. C. Price, 15

Water, Spectral Response

Environmental Effects on Laser-Induced Fluorescence Spectra of Natural Waters, A. Vodacek and W. D. Philpot, 83

Measurement of the Surface Emissivity of Turbid Waters, L. Wen-Yao, R. T. Field, R. G. Gantt, and V. Klemas, 97